

WHAT IS CLAIMED IS:

1. A vehicular radio wave receiver provided inside a vehicle that has a panel as a body of the vehicle and a window linked with the panel at an edge of the panel, comprising:

a circuit board having a receiving circuit on a first surface of the circuit board and a ground pattern on a second surface that is opposite to the first surface; and

a dielectric antenna that has a shape of a pole and receives a signal to send the signal to the circuit board,

wherein the circuit board is disposed close to the edge of the panel so that the ground pattern closely faces an inner surface of the panel, and

the dielectric antenna is axially disposed along the window as extending from a peripheral portion of the circuit board close to the edge of the panel.

2. The vehicular radio wave receiver according to claim 1, wherein the dielectric antenna is disposed not less than 0.06λ away from a metallic member of the vehicle in a radial direction of the dielectric antenna, and the symbol λ is a wavelength.

3. A vehicular radio wave receiver provided inside a vehicle comprising:

a circuit board having a receiving circuit and a ground pattern; and

a dielectric antenna that has a shape of a pole and

receives a signal to send the signal to the circuit board,

wherein at least one side of the circuit board in a lateral direction or a longitudinal direction has $\lambda/4$ length, and the symbol λ is a wavelength,

the dielectric antenna is disposed as extending from a peripheral portion of the circuit board to an outside of the circuit board, and

the ground pattern of the circuit board is an elongate form extended in a direction opposite to the dielectric antenna so that the dielectric antenna and the ground pattern function as elements of a dipole antenna.

4. A vehicular radio wave receiver provided inside a vehicle having an inside rear view mirror, which is hanged from a roof or a windshield of an interior of the vehicle and holds a rectangular mirror in a housing of the inside rear view mirror, comprising:

a circuit board having a receiving circuit and a ground pattern; and

a dielectric antenna that has a shape of a pole and receives a signal to send the signal to the circuit board,

wherein the circuit board is housed in the housing of the inside rear view mirror with being combined with the rectangular mirror as a multilayer structure,

the dielectric antenna is disposed as extending from a peripheral portion of the circuit board to an outside of the circuit board in a lateral direction of the circuit board, and

the ground pattern of the circuit board is an elongate form extended in a direction opposite to the dielectric antenna so that the dielectric antenna and the ground pattern function as elements of a dipole antenna.

5. An information displaying apparatus with a radio wave receiver comprising:

a display displaying vehicular driving information;

a circuit board having a control circuit that controls the display; and

a radio wave receiver having a receiving circuit, a ground pattern, and a pole type dielectric antenna that receives a signal to send the signal to the receiving circuit,

wherein the radio wave receiver is disposed at a peripheral portion of the circuit board,

the dielectric antenna is disposed as extending in a certain direction, and

the ground pattern of the radio wave receiver is an elongate form extended in a direction opposite to the dielectric antenna so that the dielectric antenna and the ground pattern function as elements of a dipole antenna.

6. The information displaying apparatus according to claim 5, wherein the radio wave receiver is disposed at a peripheral portion of the circuit board in a lateral direction of the circuit board, and the certain direction of the dielectric antenna is a longitudinal direction.

7. The information displaying apparatus according to claim 5, wherein the radio wave receiver is disposed at a peripheral portion of the circuit board in a longitudinal direction of the circuit board, and the certain direction of the dielectric antenna is a lateral direction.

8. The information displaying apparatus according to claim 5, wherein the receiving circuit of the radio wave receiver is a part of the circuit board.

9. The information displaying apparatus according to claim 5, wherein the receiving circuit of the radio wave receiver is separated from the circuit board.

10. The information displaying apparatus according to claim 5, wherein the circuit board is a rectangular form, and the radio wave receiver is disposed at the side of the circuit board.